



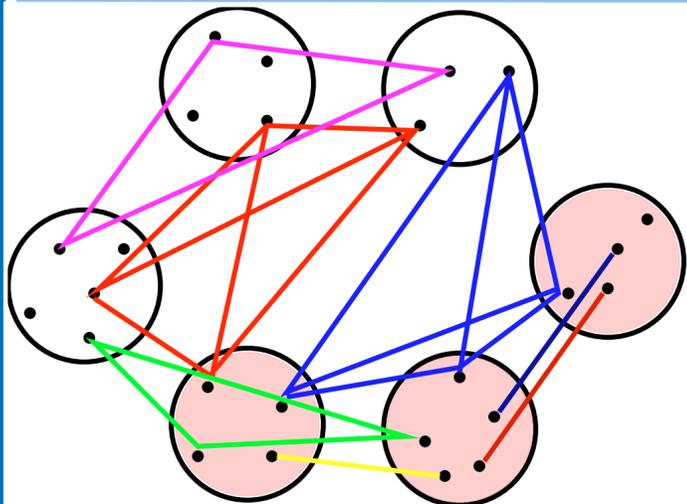
Berlin  
Mathematical  
School

## BMS Friday Colloquium

**Friday 20 January 2012 at 14:15**

*Tea before the lecture begins at 13:00*

BMS Loft, Urania, An der Urania 17, 10787 Berlin



### Penny Haxell

*(U Waterloo)*

#### Independent transversals, or, choosing faculty committees

The dean (as usual) wishes to form a committee by choosing one member of each department in the faculty. However, as everyone knows, there are certain pairs of faculty members who really should not be on a committee together. Neither one of them can tolerate the other having the last word. Thus the dean needs to avoid choosing both members of any such pair.

Under what conditions can a good committee be chosen? Can we characterise those faculties for which a good committee exists? What if the dean wants to form several disjoint committees? Penny Haxell will discuss some of the mathematics behind this type of questions, including the notion of independent transversals in graphs, strong colouring, and matchings in hypergraphs.

Penny Haxell works in Combinatorics and Graph Theory focussing on extremal problems. She has obtained highly interesting results using combinatorial, probabilistic and, more recently, topological tools in a very fascinating manner. In all her work she exhibits impressive capability, originality and technical ability, and her pioneering work is well known internationally. In 2006, Penny Haxell has been awarded the Krieger-Nelson Prize, presented by the Canadian Mathematical Society (CMS) in recognition of an outstanding woman in mathematics. As recipient of a Friedrich Wilhelm Bessel Research Award from the Alexander von Humboldt Foundation Penny Haxell will be conducting research at FU Berlin from 2012 - 2014.